Rural Broadband

Overcoming Obstacles and Achieving the Vision

USF Reform Intercarrier Comp Reform

Delivering Broadband to High-Cost Areas of Rural America

Targeted Broadband Funding



Overview

- The Vision
- The Rationale
- The History
- The Problem
- The Solution
- Targeted Broadband Support

The Vision

President Obama:

"I believe that America should lead the world in broadband penetration and Internet access. As a country, we have ensure that every American has access to telephone service and electricity, regardless of economic status, and I will do likewise for broadband Internet access."

 Broadband should be ubiquitously available, affordable for all and widely adopted



The Rationale

President Obama:

"Full broadband penetration can enrich democratic discourse, enhance competition, provide economic growth, and bring significant consumer benefits."

 Broadband has become a basic need, as fundamental as other utilities



The History

- RLECs came into being to serve rural areas that Bell found unprofitable to serve
- RLECs have been able to provide comparable services to urban areas at comparable rates due to an evolving mixture of:
 - Implicit support from Intercarrier Compensation (ICC), and
 - Explicit support from the Universal Service Fund
- RLECs have built hybrid fiber/copper networks that are enabling the delivery of high-speed Broadband services to millions of rural consumers



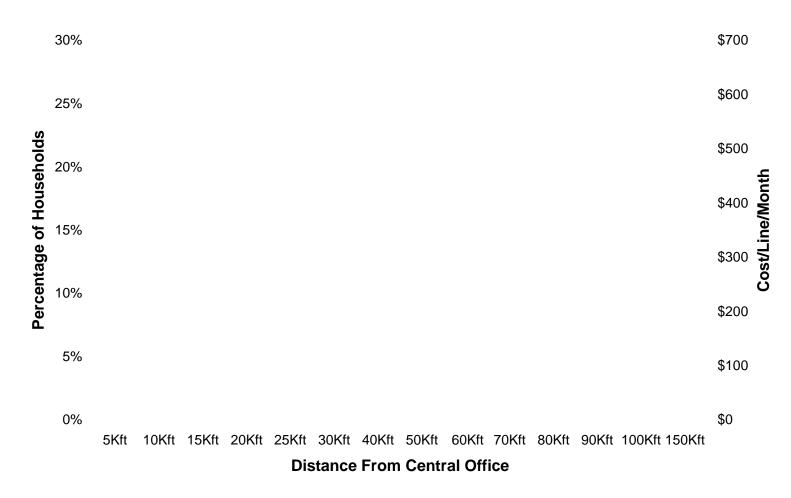
The Problem

- Sparsely populated rural areas are costly to serve
 - Costs greatly exceed revenues that will be generated
 - So long as the Nation maintains a policy goal of delivering Broadband to all of its citizens, explicit government support will be required
- RLECs depend on USF and ICC to recover over half of their network costs (some > 70%)
- The current USF and ICC mechanisms will not be sustainable in a Broadband world
- Without fundamental USF and ICC reform
 - RLEC customers will face a disaster of train-wreck proportions
 - The Nation's Broadband vision will be difficult, if not impossible to achieve



Rural Areas are Costly to Serve

All U.S. Households





Rural Areas are Costly to Serve

Households per	Nationwide	\$140
Square Mile	Average Cost	\$120
0 to 5	\$133.00	\$400
6 to 100	\$48.44	\$100 హ
101 to 200	\$30.72	\$ \$80
201 to 650	\$26.87	Monthi 860
651 to 850	\$25.05	E
851 to 2550	\$23.11	\$40
2551 to 5000	\$21.83	\$20
5001 to 10,000	\$20.25	φ20
> 10,001	\$18.16	\$0
		1 10 100 1,000 10,000 100,000 Density (Households per Square Mile)

Chart VII



RLECs Depend Heavily on USF and Access Charges

Source of Revenues

Source	Rural	RBOC
End User	27%	61%
Access Charges	26%	10%
USF	30%	0%
Other	17%	29%

Both Programs Face Serious Challenges

Current USF and ICC Mechanisms Are Not Sustainable

Universal Service Fund

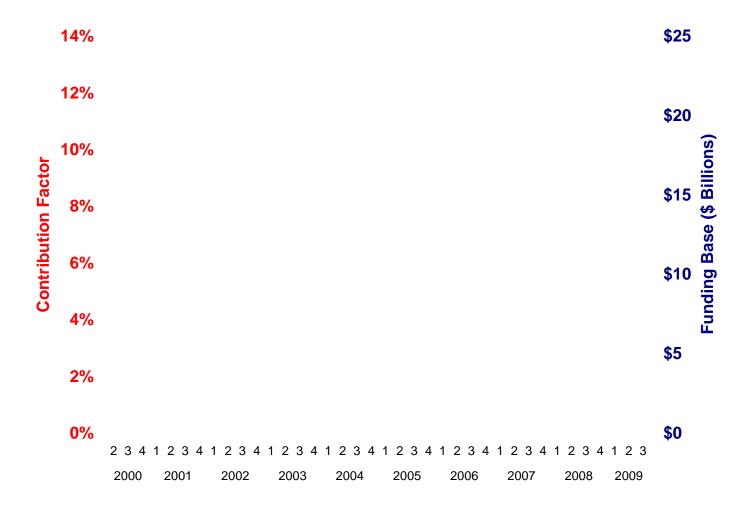
- The current USF collection mechanism based on Interstate and International long distance revenues
- Distance has no meaning on the Internet
- The contribution factor is 12.7% and growing
- The need for explicit funding will grow to meet the needs of unserved and underserved consumers for Broadband

Intercarrier Compensation

- Most ICC is billed "per minute-of-use" basis
- MOUs are declining rapidly
- MOUs do not exist in a Broadband world
- ICC, as we have known it, will soon go away

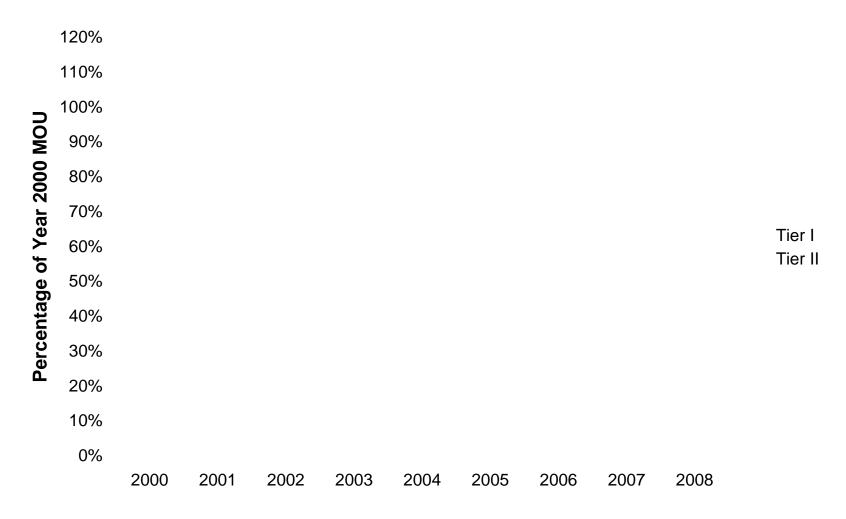


USF Collection Mechanism





Access MOU Trends





USF and ICC Reform is Crucial!

- RLECs in the most rural parts of the nation rely on USF & ICC to cover 70% or more of operating costs
 - A significant disruption of this cash flow would threaten continued viability of many RLEC's network operations
 - Failures of this nature would create a catastrophe of train-wreck proportions for rural consumers
- Current ICC and USF mechanisms must be fundamentally reformed for a Broadband world
- Perpetuation of the outdated Telecommunications vs. Information Service dichotomy will make the National's Broadband Vision difficult to achieve



The Solution

- The USF Collection Mechanism must be changed to assess telephone numbers and broadband connections
- Broadband must be supported by better-targeted explicit universal service mechanisms
- Access charges must be phased out as they are not sustainable in a Broadband world
- The support for rural connectivity that was implicit in ICC must become the responsibility of all who rely on America's network of networks (aka RM)
- Wireless networks lack the speed and throughput capacity to efficiently replace rural wire/fiber-line networks a rural Broadband delivery vehicle

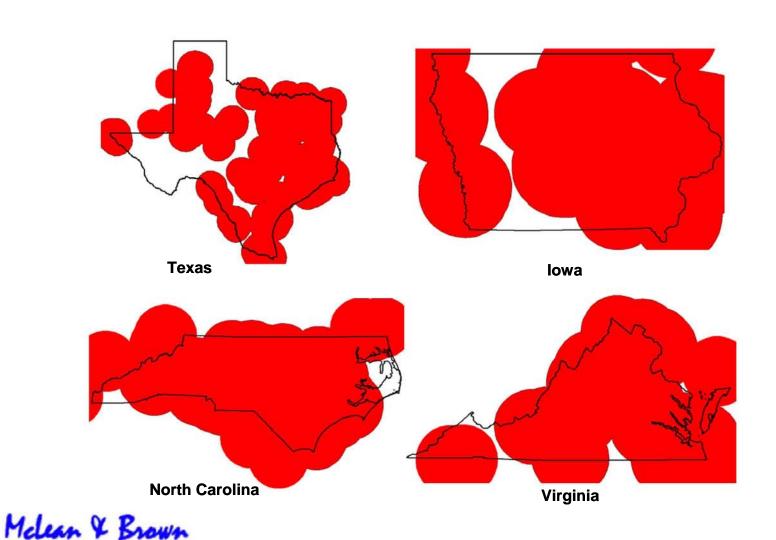


Targeted Broadband Support

- Funding must go where it is most needed to support the most efficient Broadband solutions
- Fund recipients must be held accountable for results
- Funding should be targeted to one wire/fiber-line and no more than one wireless Broadband provider in a rural service area
- Historical USF and ICC regimes must transition into a coordinated rural Broadband support framework
- The BIP and BTOP programs must better target "remote" consumers and ensure Broadband delivery to unserved and underserved rural areas



BIP Definition of "Remote"



For a copy of the complete white paper go to:

www.rural-alliance.org

